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## **EUROPEAN PATENT OFFICE**

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TITLE : EPOXY RESIN COMPOSITION AND

SEMICONDUCTOR DEVICE SEALED

THEREWITH

ABSTRACT :

PROBLEM TO BE SOLVED: To obtain a high-reliability composition giving a package reduced in warpage, having good flowability, excellent moldability, free from the formation of resin crack, having good adhesiveness and excellent humidity resistance after mounting, by using a specified epoxy resin and a specified phenolic resin.

SOLUTION: This composition essentially consists of an epoxy resin (A) containing a polyfunctional epoxy resin (a) represented by formula I(wherein R<sup>1</sup>,

R<sup>2</sup> and R<sup>3</sup> are each hydrogen or a 1-10C alkyl) and an

epoxy-modified polybutadiene (b) in an a/b weight ratio of I-100, a polyfunctional phenolic resin (B) represented by formula II (wherein n is 0 or an integer of 1 or greater), an inorganic filler (C) and a cure accelerator (D) and contains component C in an amount of 25-93 wt.% based on the composition. A semiconductor chip is sealed with a cured product of this composition to form a BGA type sealed semiconductor device.

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